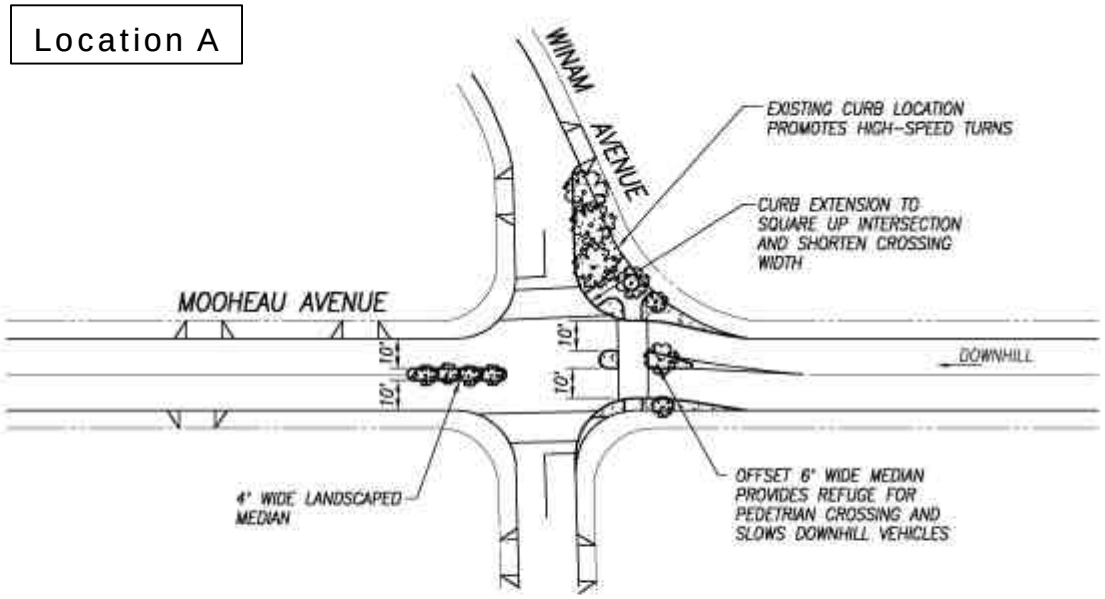
Treatment Designs

Location numbers are keyed to map on page 13.

Location A

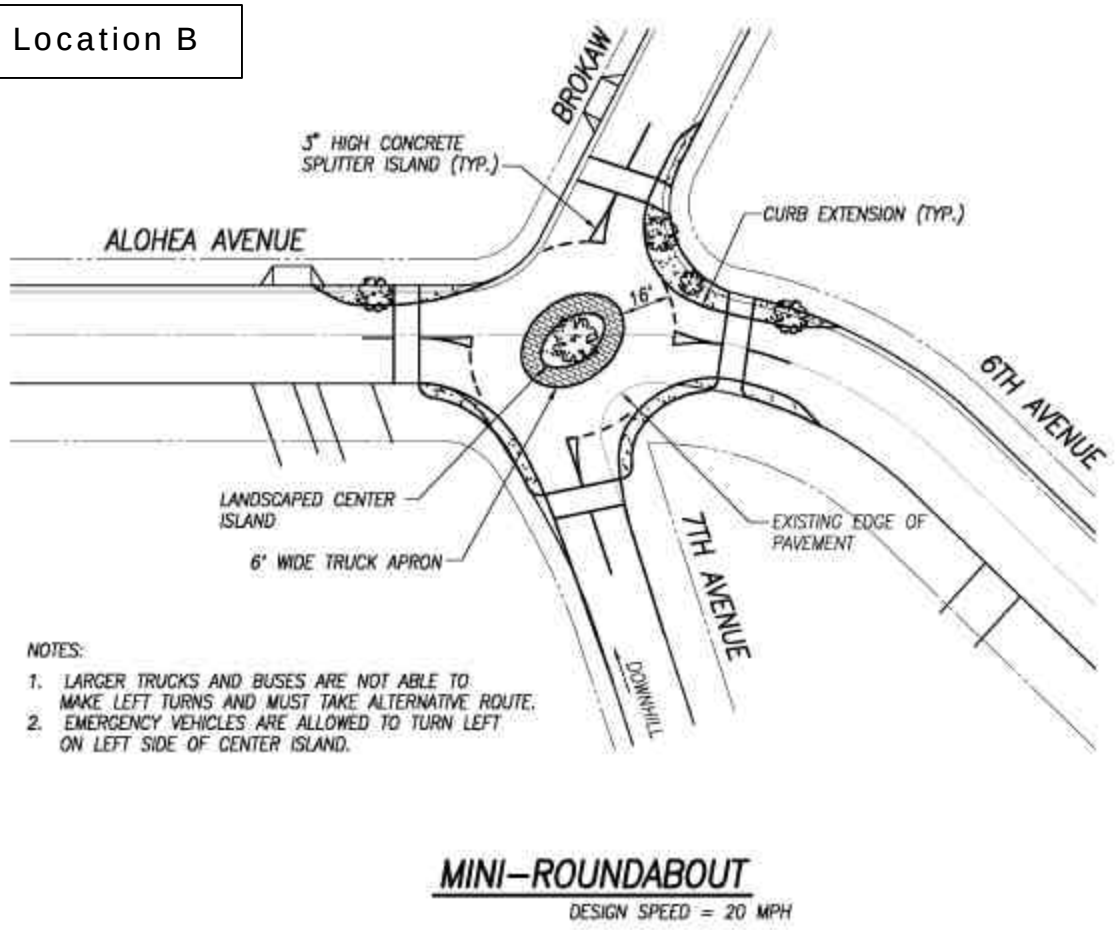


MEDIANS AND CURB EXTENSIONS

Mooheau Avenue promotes high speeds due to its steepness and unobstructed line of sight downhill. High speed right turns downhill onto Winam Avenue are common because of the large curb radius at the intersection. The devices chosen for this traffic calming at this intersection are medians and curb extensions. The medians visually and physically narrow the lane widths within Mooheau Avenue, help lower motorist speed, and prevent vehicles from cutting corners on left turns. Reducing the curb radius and extending the curb into the roadway helps to "square-up" the skewed intersection and eliminates high-speed right turns onto Winam Avenue. With either of these devices, pedestrian crossing distances will be reduced, making it safer for pedestrians to cross the street.

Trees and landscaping in the medians and curb extensions are an essential part of the traffic calming devices. Trees make the medians and curb extensions more visible to oncoming traffic. Landscaping will help beautify the intersection by replacing concrete and asphalt with green space.

Location B

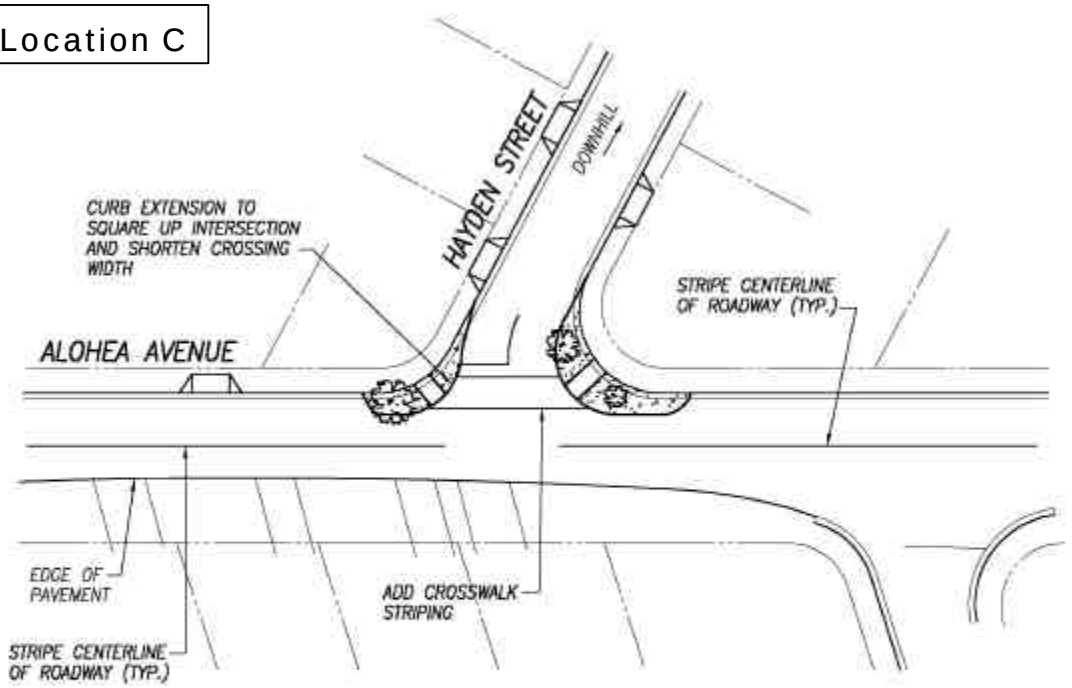


The intersection of Alohea Avenue and 7th Avenue was considered dangerous by the community. Sight distance is poor. Residents expressed concerns about vehicles running stop signs. To address this situation, the community selected a mini-roundabout because of its ability to reduce speeds of traffic while keeping the flow unrestricted. This location is not ideal for a full-sized roundabout due to the lack of right-of-way and steep road grades on 7th Avenue and Brokaw Street. The grade is not more than 5%. Thus, a roundabout can be considered for this location.

Mini-roundabouts create improved conditions for drivers because the stop signs at the intersection are eliminated, allowing vehicles on any approach to proceed through the intersection at a controlled speed. One drawback is that mini-roundabouts usually cannot accommodate left-turn movements of large trucks. However, emergency vehicles can be accommodated by installing mountable splitter islands and allowing left turns on the left side of the center island.

Due to the existing road grades, a more detailed study should be conducted to determine the feasibility of the chosen treatment.

Location C

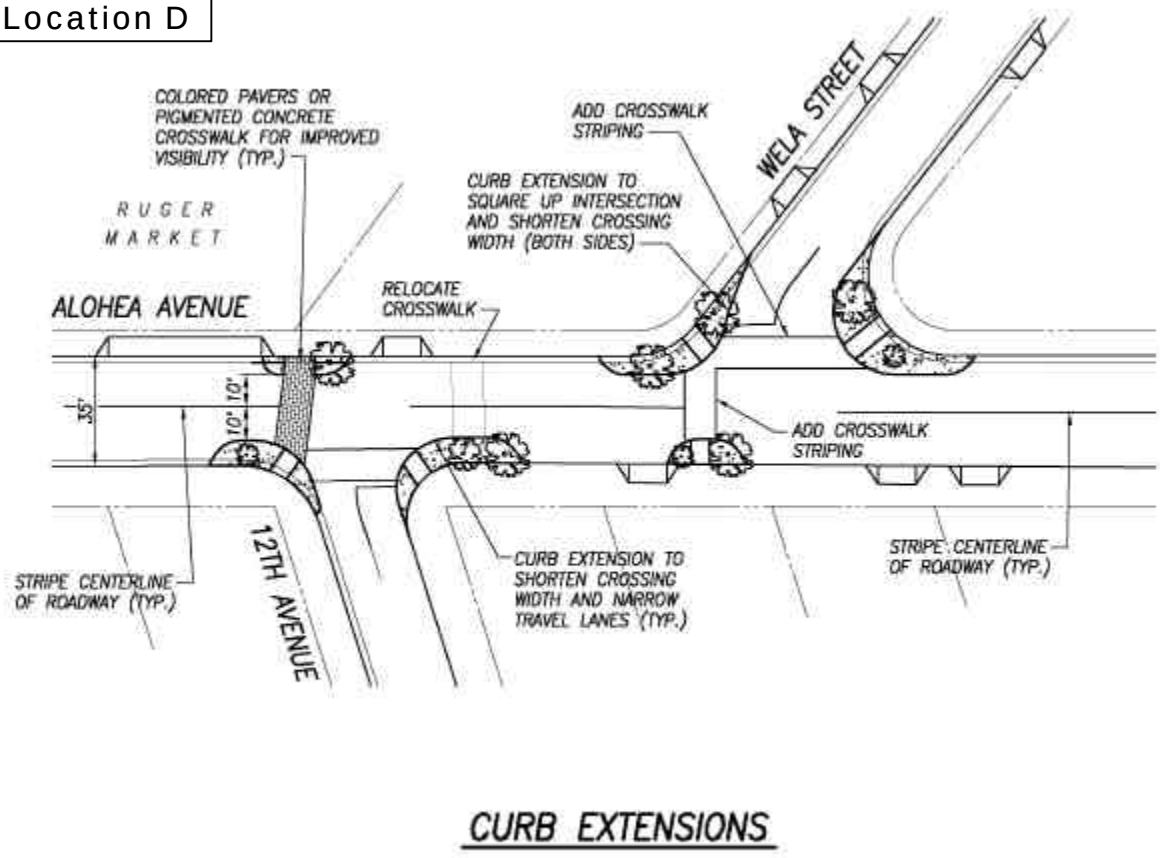


CURB EXTENSIONS

Hayden Street drops off in elevation from its intersection at Alohea Avenue. Residents expressed their concern that the sight distance is poor at this intersection due to the difference in road grades. The treatment that was chosen is bulbouts, or curb extensions, on Alohea Avenue. This would allow drivers on Hayden Street to pull forward into the intersection for improved sight distances. By reducing the curb radius, turning speeds are reduced, making it safer for residents on Hayden Street. Another benefit is that crossing distances for pedestrians are shortened.

Improvements at this intersection are also under consideration as a Kapahulu Community Vision project. The residents at the charrette were in support of the design.

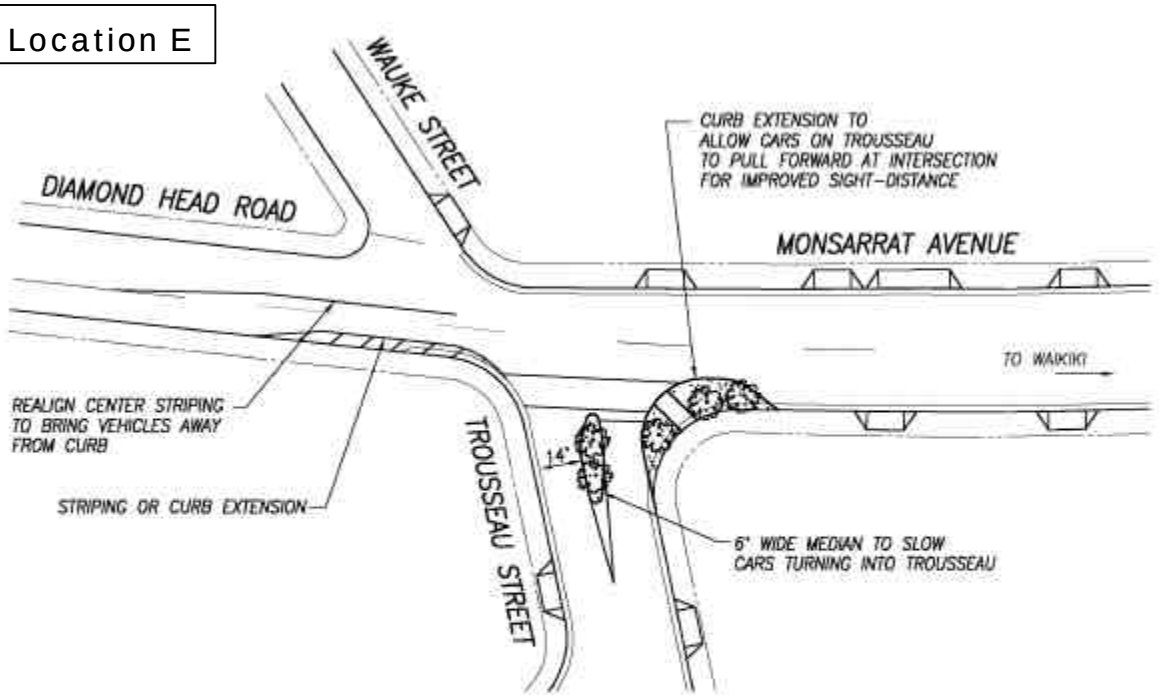
Location D



The designs chosen for Alohea Avenue at 12th Avenue and at Wela Street are bulbouts, or curb extensions. The residents had concerns about speeding, pedestrian safety, and limited sight distance at the Wela Street intersection due to the difference in road grades and on-street parking. Curb extensions would allow drivers on Wela Street to pull forward into the intersection for improved sight distances. Bulbouts on Alohea Avenue help to shorten crossing distances for pedestrians and protect on-street parking.

Improvements at this location also are under consideration as a Kapahulu Community Vision project. The residents at the charrette were in support of the design.

Location E

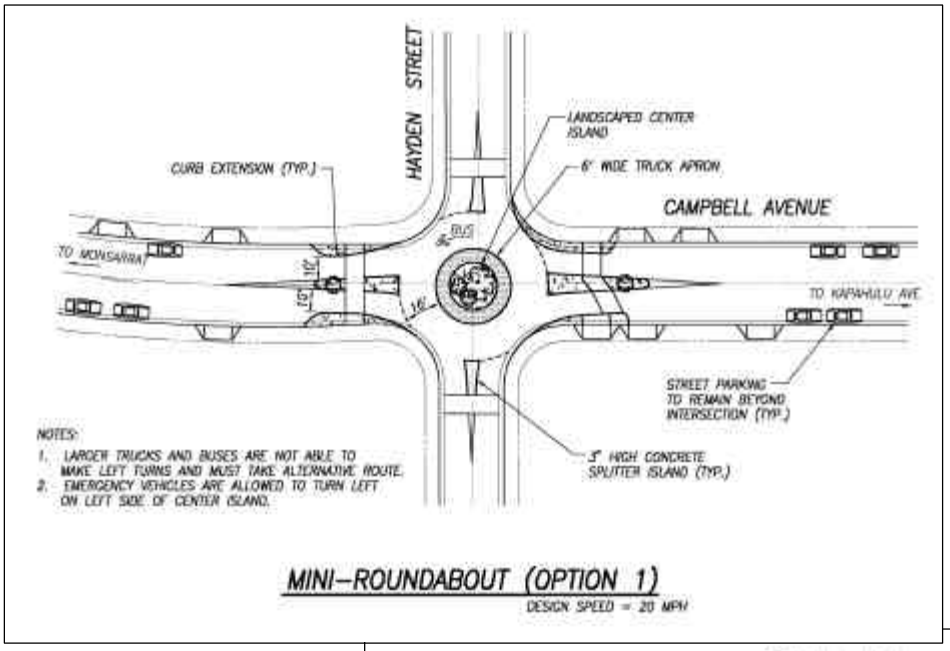


CURB EXTENSION AND MEDIAN

Residents expressed concern about limited sight distance at the intersection of Monsarrat Avenue and Trousseau Street, making it difficult to turn left onto Monsarrat Avenue. Trousseau Street drops off in elevation from its intersection at Monsarrat Avenue and sight distance is poor due to the difference in road grades. The treatment chosen is a curb extension combined with realignment of the striping on Monsarrat Avenue. This would allow drivers on Trousseau Street to pull forward into the intersection for improved sight distances. In addition, a median is proposed on Trousseau Street in order to reduce turning speeds.

Trees and landscaping in the median and curb extensions are an essential part of these devices. Trees make the medians and curb extensions more visible to oncoming traffic, especially when there is a sudden change in grade. It is also important to utilize tall, thin standing trees in areas where sight distances would be impeded.

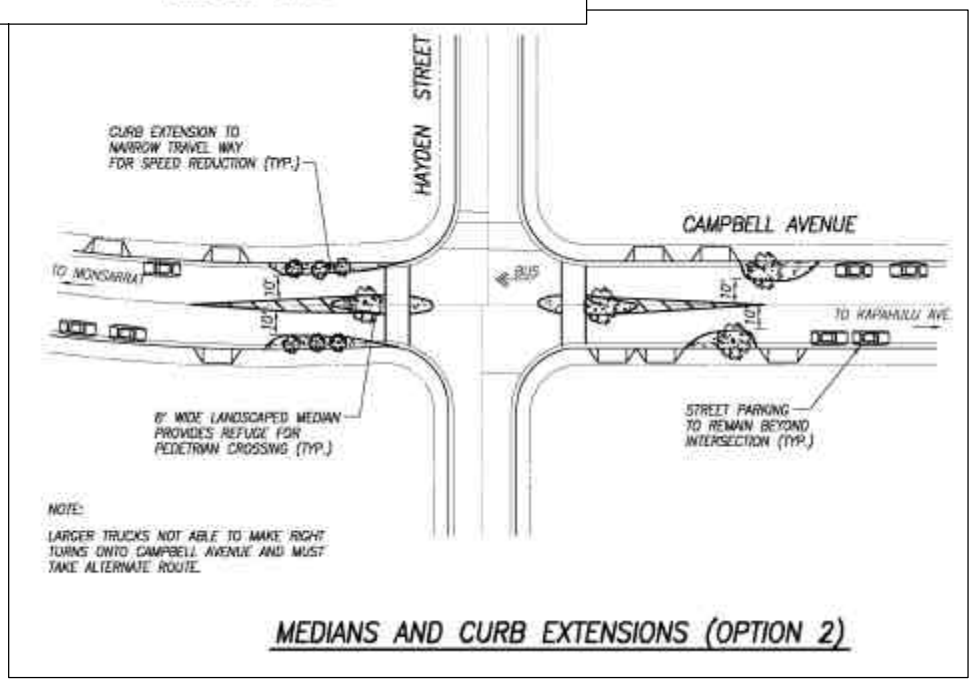
Location F-1



MINI–ROUNDABOUT (OPTION 1)

DESIGN SPEED = 20 MPH

Location F-2

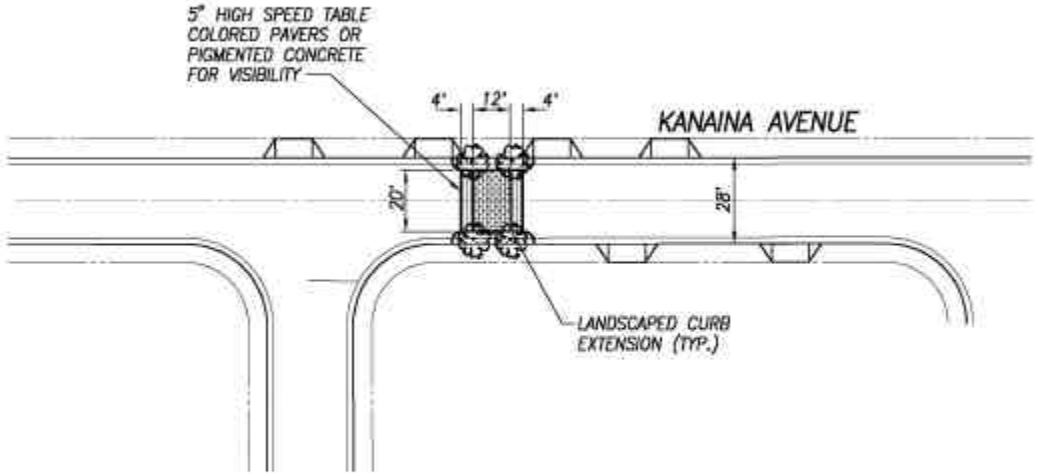


MEDIANS AND CURB EXTENSIONS (OPTION 2)

Kapahulu residents mentioned that the intersection of Campbell Avenue and Hayden Street is one of the most dangerous intersections in the neighborhood. Speeding on Campbell Avenue and limited sight distance due to on-street parking and curvature of the roadway are major problems. Two designs were proposed, including a mini-roundabout and medians and curb extensions. The mini-roundabout was chosen as one of the community's top priorities.

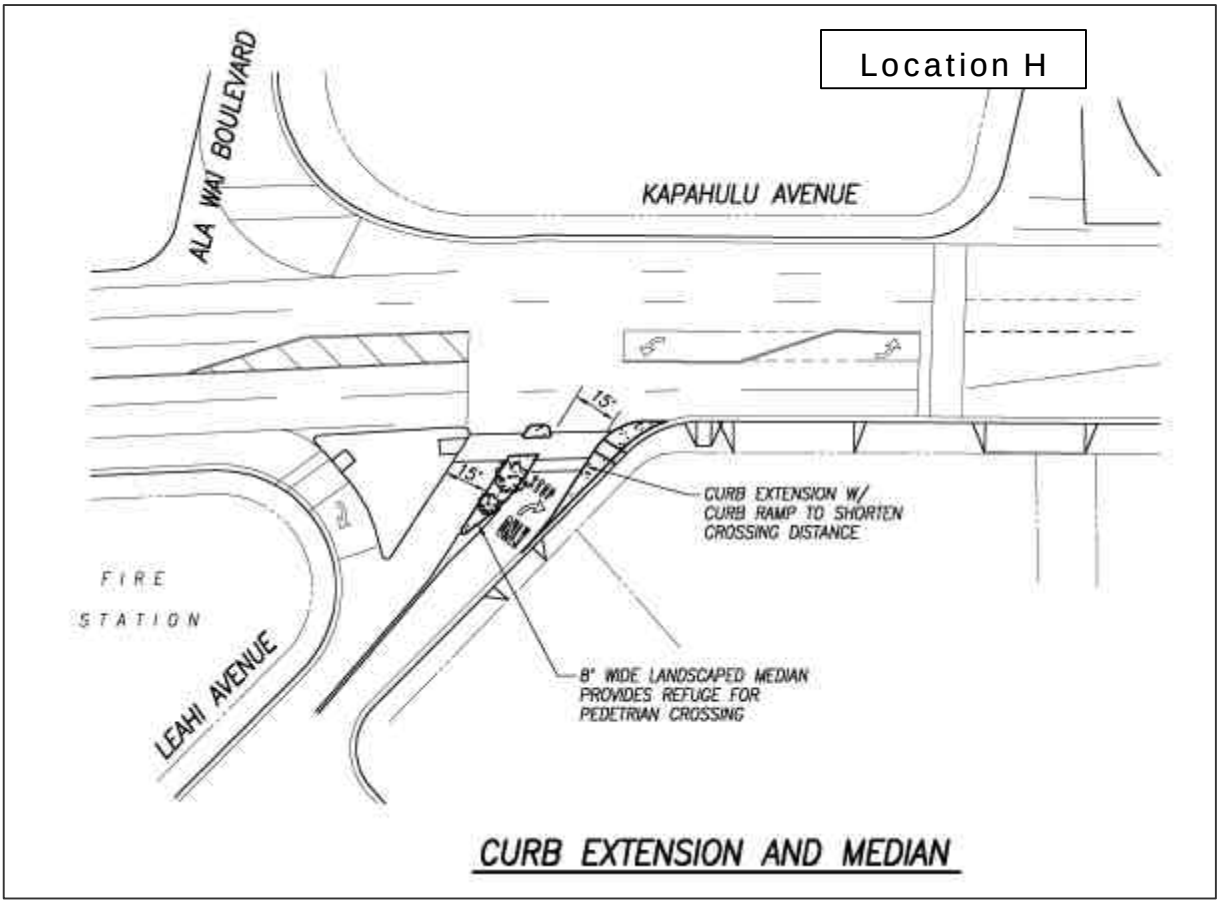
Either one of these measures also can be installed on Campbell Avenue at the intersection of Brokaw or Catherine Streets in order to control the vehicle speeds along the avenue.

Location G



TYPICAL SPEED TABLE

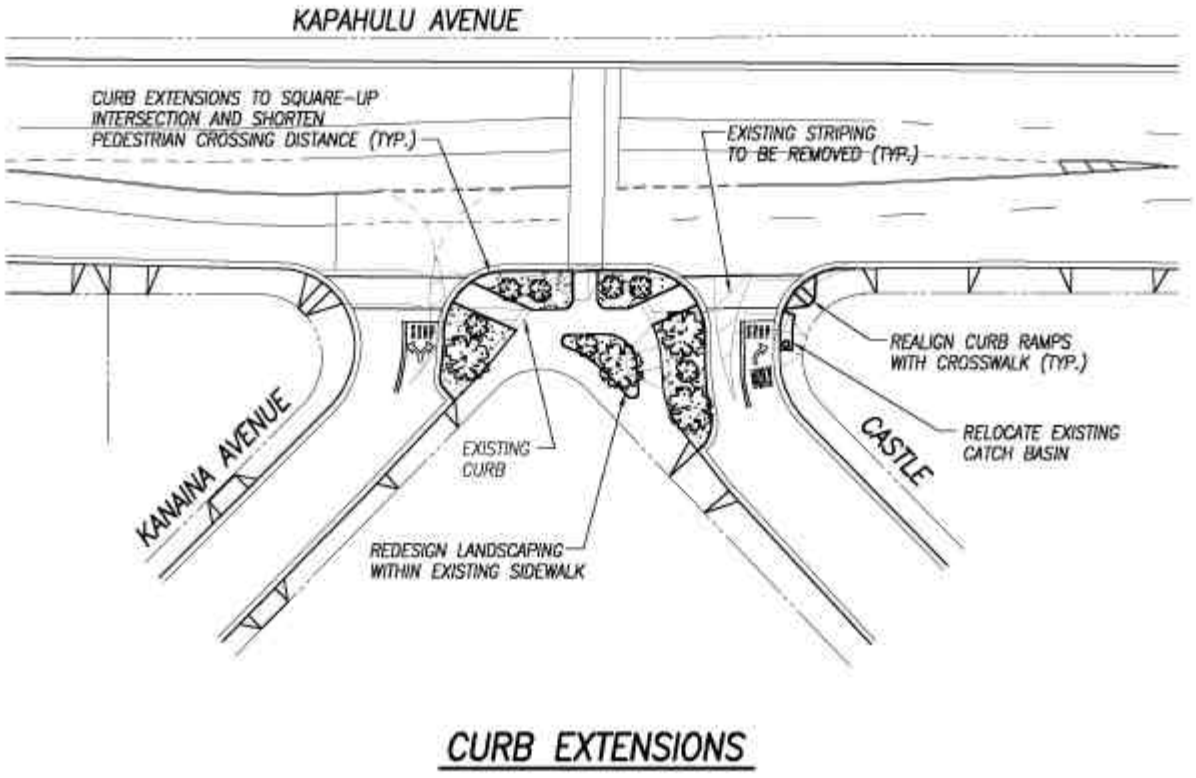
The Kapahulu community expressed concern about speeding along Kanaina Avenue and the use of Kanaina Avenue for cut-through purposes. They selected speed humps as a measure to help reduce vehicle speeds and divert traffic onto more suitable roads. To be most effective, speed tables should be installed along Kanaina Avenue at 400-foot intervals.



The community identified the intersection of Kapahulu Avenue and Leahi Avenue as dangerous for pedestrians crossing the street. The selected traffic calming measures include a curb extension and median to reduce pedestrian crossing distances and provide refuge from traffic.

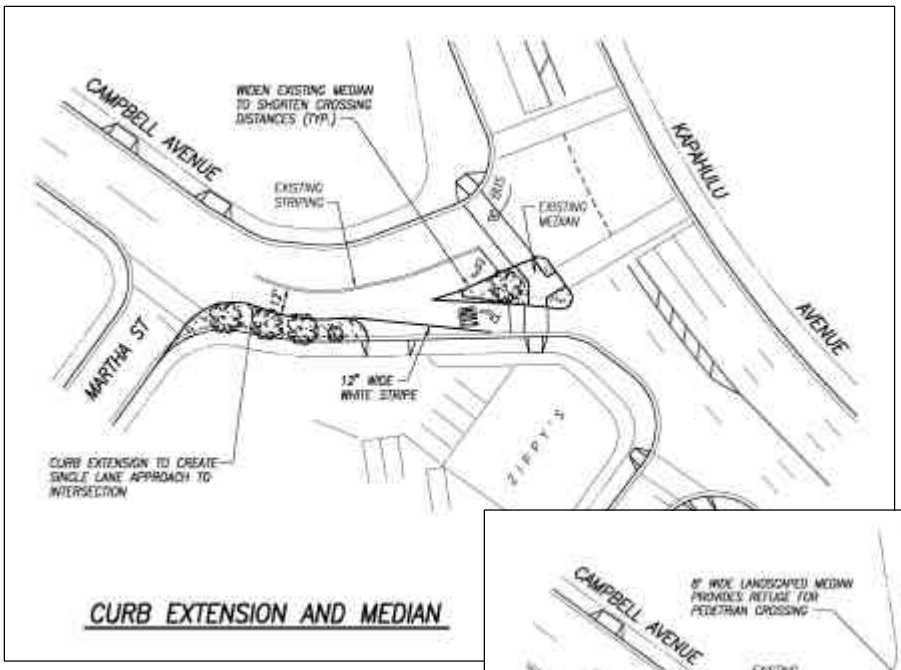
Improvements at this intersection are also under consideration as a Kapahulu Community Vision project. The residents at the charrette were in support of the design.

Location I



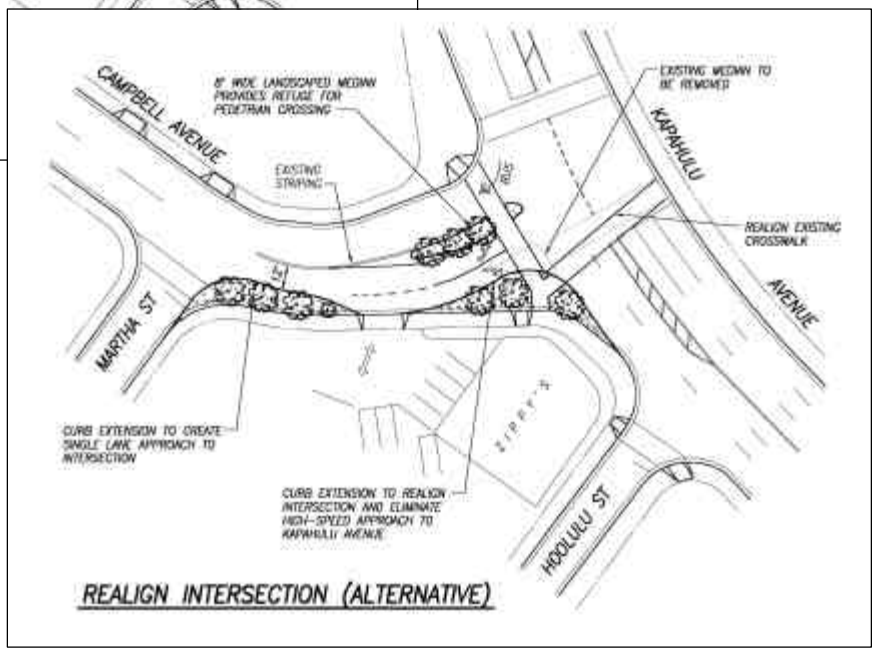
The intersection of Kapahulu Avenue, Kanaina Avenue and Castle Street was identified by residents as very dangerous because of the proximity of each intersecting street and lack of traffic signals. In lieu of installing traffic signals, the community selected curb extensions. This will help to "square up" each intersecting street and eliminate high speed turning movements. It will also reduce pedestrian crossing distances.

Improvements at this intersection are also under consideration as a Kapahulu Community Vision project. The residents at the charrette were in support of the design.



CURB EXTENSION AND MEDIAN

Location J



REALIGN INTERSECTION (ALTERNATIVE)

Location K

The treatments selected for the intersection of Kapahulu Avenue and Campbell Avenue include a curb extension and median improvements. Residents identified Campbell Avenue as an area of concern due to speeding. There is no stop control where it intersects Kapahulu Avenue, making it dangerous for pedestrians. A widened median will reduce pedestrian crossing distances.

An alternative design is to realign Campbell Avenue and "square up" the intersection by adding curb extensions. Vehicles will be required to stop before entering Kapahulu Avenue. Adding a median will reduce pedestrian crossing distances and provide refuge. The design team recommends this alternative because it addresses the speeding as well as pedestrian safety concerns.

Improvements at this intersection are also under consideration as a Kapahulu Community Vision project. The residents at the charrette were in support of the design.

Follow-up Workshop

The second neighborhood meeting was held on June 13, 2001. The Traffic Calming team presented the concept drawings generated from the previous April 17, 2001 charrette. Community members turned out again to review and provide input on the proposed designs. During this second workshop, several important questions and comments were expressed:

Q: How do drivers see past the curb extensions when attempting to turn from Trousseau on to Monsarrat?

A: Landscaping of the bulbouts will include low shrubbery and trees with a high canopy. Visibility across a bulbout will be unimpaired. A driver is supposed to yield to pedestrians and then move forward towards the travel lane. The bulbout will allow the driver to pull up closer to the travelway on Monsarrat and benefit from an increase in visibility up Monsarrat.

Q: Traffic calming appears to be a band-aid solution. How can the community work with the City to solve the overall problem?

A: Kapahulu is an older neighborhood. The people who planned Kapahulu did not anticipate the growth that would occur on Oahu and where it would occur. People have learned to use the existing streets to meet their needs. The need for people to get from East Honolulu to downtown Honolulu is a regional problem that is being addressed by the City and the State. The community needs to work with their elected officials and the Department of Transportation Services and Department of Transportation to find solutions to these regional problems. The traffic calming program is intended to address driver behavior within the existing streets rather than to solve regional or area-p. wide traffic or transportation problems.

Q: Why was Diamond Head Road next to KCC not covered?

A: The area selected included Makapuu and Monsarrat and only on the first part of Diamond Head Road.

Q: How will a roundabout operate on Campbell and Hayden? There are many limousine services on Campbell with large vehicles.

A: A roundabout will limit turning movements off of Campbell. Larger vehicles will be able to travel along Campbell but will have difficulty making turns off of Campbell into the rest of the neighborhood.

Q: Can there be partial or full street closures?

A: Community support for a partial closure of a road will be required for it to be considered. In general, the traffic calming program does not recommend road closures but the comments of the community will be documented.

Q: Why not add more speed limit signs and get the police to ticket speeders?

A: The police enforce speed limits but there are constrained by the available manpower. They usually catch the last 15 percent of the speeders. It is the traffic calming measures that must slow down the remaining 85 percent.

Summary

The primary objectives of this process were to: 1) identify issues and concerns, 2) come up with workable solutions, and 3) most importantly, have the residents and board members develop a sense of ownership and commitment to solve the problems that affect their safety, property values, and quality of life. This is a citizen's hands-on program, working with government officials. Citizen input is essential to its success.

Kapahulu residents at the second workshop agreed on a prioritized list of the most important issues that they wanted to see addressed in their neighborhood. This included speeding, volume, identification of higher-volume streets, and designated truck routes. The roads and intersections below needed the most attention, and have conceptual designs the community showed interest in implementing.

Priorities (from 2nd workshop)

1. **Mini roundabouts (p. 19):**
   a. **Campbell Avenue and Hayden Street**
   b. **Campbell Avenue and Catherine Street (or Brokaw Street)**
2. **Curb extensions at Mooheau Avenue and Winam (p. 14)**
3. **Mini roundabout at the intersection of Alohea Avenue and 7th Avenue (p.15)**
4. **Curb extensions at Alohea Avenue and Hayden Street (p. 16)**
5. **Curb extensions at Alohea Avenue and Wela Street and 12th Avenue (p. 17)**

Next Steps

The process used has led to consensus-building, workable solutions, and an effective partnership between the county and the neighborhood. This should ensure that issues are properly addressed, costs are minimized, and results will provide maximum benefit. If ownership of the problems is weak or lacking, stay on track. The following steps are recommended and are vital to success.

(1) Form a Kapahulu Transportation Task Team. The Kapahulu Neighborhood Board Citizen's Traffic Committee should take the lead. These individuals have already shown a commitment to the process. The team should meet regularly to help refine the plan and work through implementation strategies with City staff.

(2) The neighbors at the meeting could take it upon themselves to share copies of this report with their neighbors (door to door), and to gain added insight and support. Other effective means of building consensus might be to conduct a Traffic Calming Open House at an area residence, to hold a block party or other event.

(3) To see significant and visible changes immediately, residents should begin by being more cautious with their own driving in the neighborhood.

(4) Once a construction budget is allocated, final engineering designs and construction of improvements will be scheduled.

(5) Several of the recommendations included new landscaping features. At the second meeting, residents indicated that they would like medium to high levels of landscaping. The Transportation Task Team should work with the Community Association to determine who will care for landscaping of the new treatments, and enter into a Neighborhood Maintenance Agreement with the City.